

SWAC C&D Subcommittee Meeting

MassDEP Bureau of Air & Waste

December 6, 2016: 10:00 AM - 12:00 PM

One Winter Street, Boston



Agenda

- Welcome/Introductions
- Market Influence of Earning LEED v4 C&D Waste Recycling Credits
- Update: BMP Development for C&D Generators
- Update: C&D Debris Market Study
- Preliminary Summary of Annual C&D Report Data
- Announcements/Open Discussion
- Closing/Next Steps

Market Influence of Earning LEED v4 C&D Waste Recycling Credits

- Overview of LEED v4 and discussion:
 - Richard Moore, LEED AP BD+C ID+C
 - Richard Moore Environmental Consulting, Principle
 - Kathleen MacEwen, LEED AP BD+C
 - Consigli Construction, Project Engineering Manager

Emily Fabel, Center for EcoTechnology/RecyclingWorks in Massachusetts

UPDATE: BMP DEVELOPMENT FOR C&D GENERATORS



C&D BMP Development



- **Spring – Fall 2016:** 12 Stakeholder Meetings, over 150 participants.



- **Winter 2016/17:** Develop draft BMPs
 - EBCNE Annual C&D Summit, January 26: Present Draft BMPs
 - Distribute draft BMPs and collect comments
- **Spring 2017:** Finalize and post BMPs to RecyclingWorksMA.com
 - Present at March 2017 C&D Subcommittee Meeting
- Comments? info@RecyclingWorksMA.com or (888) 254-5525



C&D BMP Topics



- Waste Management Plans
- Reuse/Salvage
 - How to work with a nonprofit reuse outlet
 - Tax deductions for donation
 - Other reuse salvage entities
- On-site source separation
 - Materials to source separate
- Comingled collection / C&D Processing
 - What materials are easy vs hard to sort
- LEED V4 C&D recycling credit

C&D Market Study Update

DSM Environmental Services, Inc.

www.dsmenvironmental.com

December 6, 2016

SOW for C&D Debris Market Study

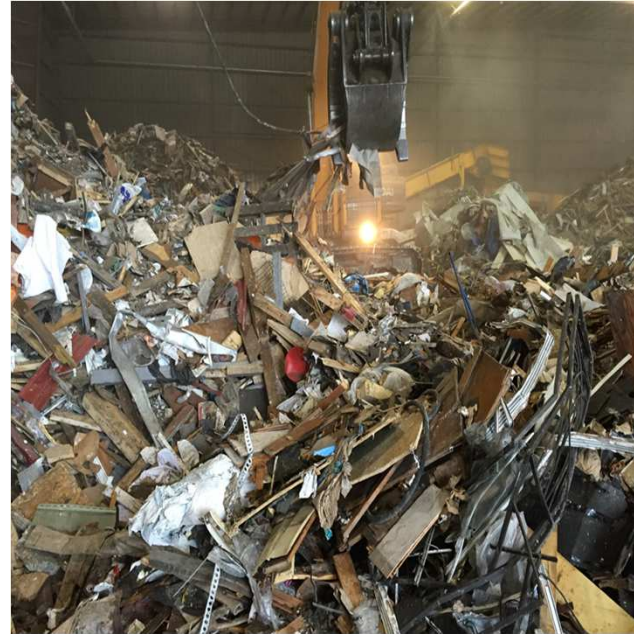
Re-assess effectiveness of C&D debris processing in Massachusetts:

- 1. Characterize the quantity and composition**
 - a. Materials received and processed by C&D processors;
- 2. Assess the current and future capacity of recycling end-markets**
 - a. Identify top 3 materials to target for increased recycling;
- 3. Evaluate separation and processing advancements**
 - a. Reduce dependency on diminishing markets (e.g. landfill dependant use applications)
- 4. Identify Barriers to Recycling**
- 5. Make recommendations to C&D Subcommittee for consideration**

(Note: MassDEP is focused on the long-term policy goal of promoting increased recycling of C&D materials – 50% by 2020)

Current Status

- Processor Interviews
 - ReEnergy Roxbury
 - E.L. Harvey & Sons
- Processor Interviews and Visual Characterization
 - Devens Recycling Center
 - Complete Material Management, Southbridge
 - Stoughton Recycling Technologies
 - Champion City Recovery C&D Transfer Station
 - Trojan Recycling, Inc.



How Visuals Are Conducted and Calculated

- Enumerator starts with waste characterization form with 8 primary material categories and roughly 50 secondary material categories
 - Primary categories: Paper; Plastic; Glass; Organic; C&D; Metal; Special; Mixed MSW
 - Examples of secondary categories:
 - Paper – OCC, Other
 - Plastic – Buckets, Film, Foamed Insulation, Other
 - Organic – Yard Waste, Carpet
 - C&D – ABC, Asphalt Roofing, Clean Lumber, Painted and Stained Wood, Plywood, Etc.
 - Special – Appliances, Electronics, Bulky Items, Etc.
 - Enumerator walks around pile and writes down the percent of each primary category **by volume**, with total percent = 100%
 - Then writes percent of all secondary categories (within primary) – to total 100% of primary
- Each visual survey entered into excel spreadsheet with volumes converted to pounds/tons based on density for each material
- Data reported in percent by weight

Visual Survey



Interim Findings and Challenges

- Not all input is C&D
 - Bulky waste a growing part of incoming streams
- Some portion of stream only suitable for landfill end uses
 - Limited landfills requiring material
- Wood markets are more restrictive than time of last study
- Definition of processing and of C&D varies

Next Steps for C&D Market Study

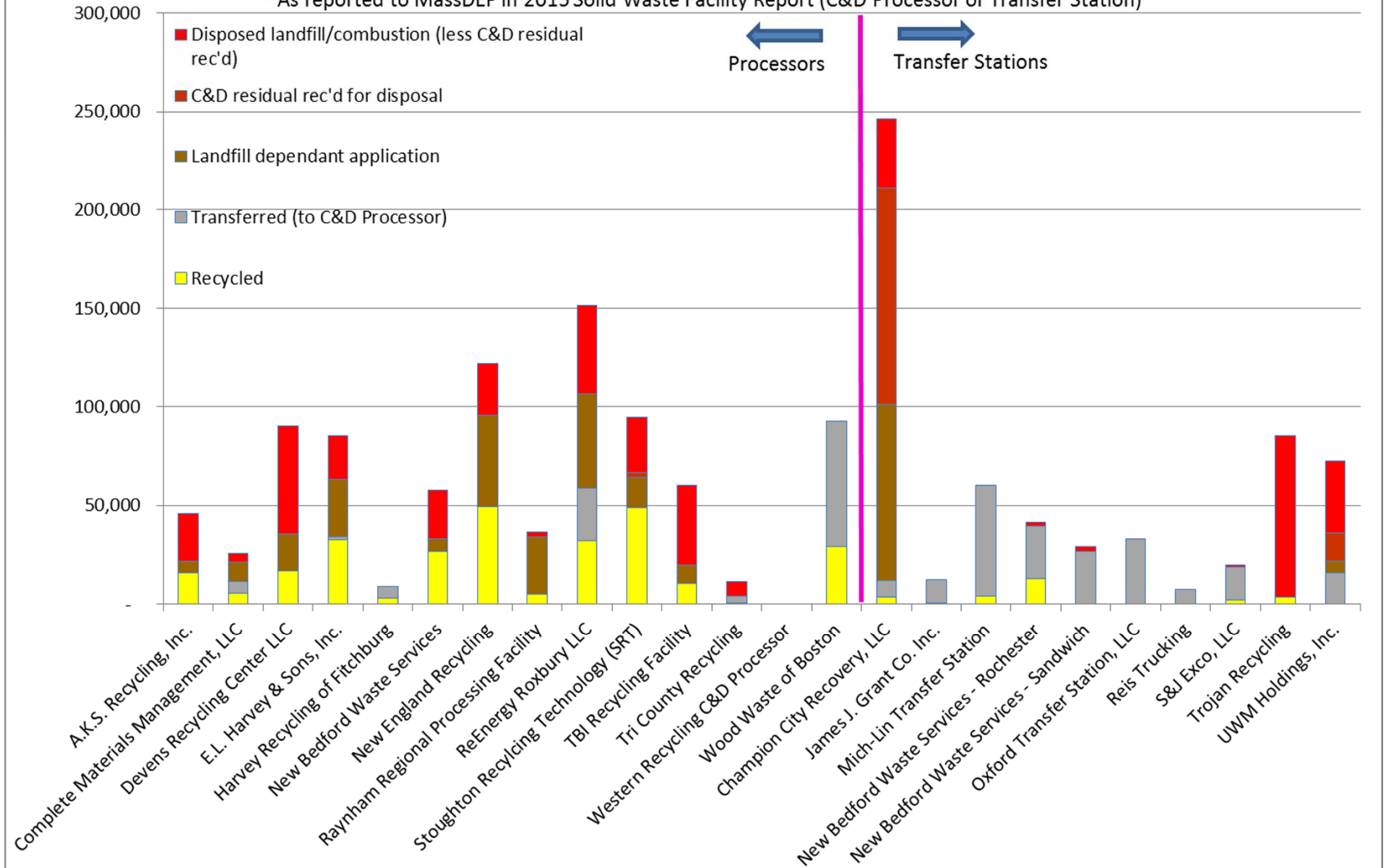
- Visuals
 - ReEnergy of Roxbury
 - E. L. Harvey & Sons
- Analysis of Visuals
- Market Survey
- Draft Report to MA DEP
- Final Report

PRELIMINARY SUMMARY OF CY2015 ANNUAL C&D REPORT DATA

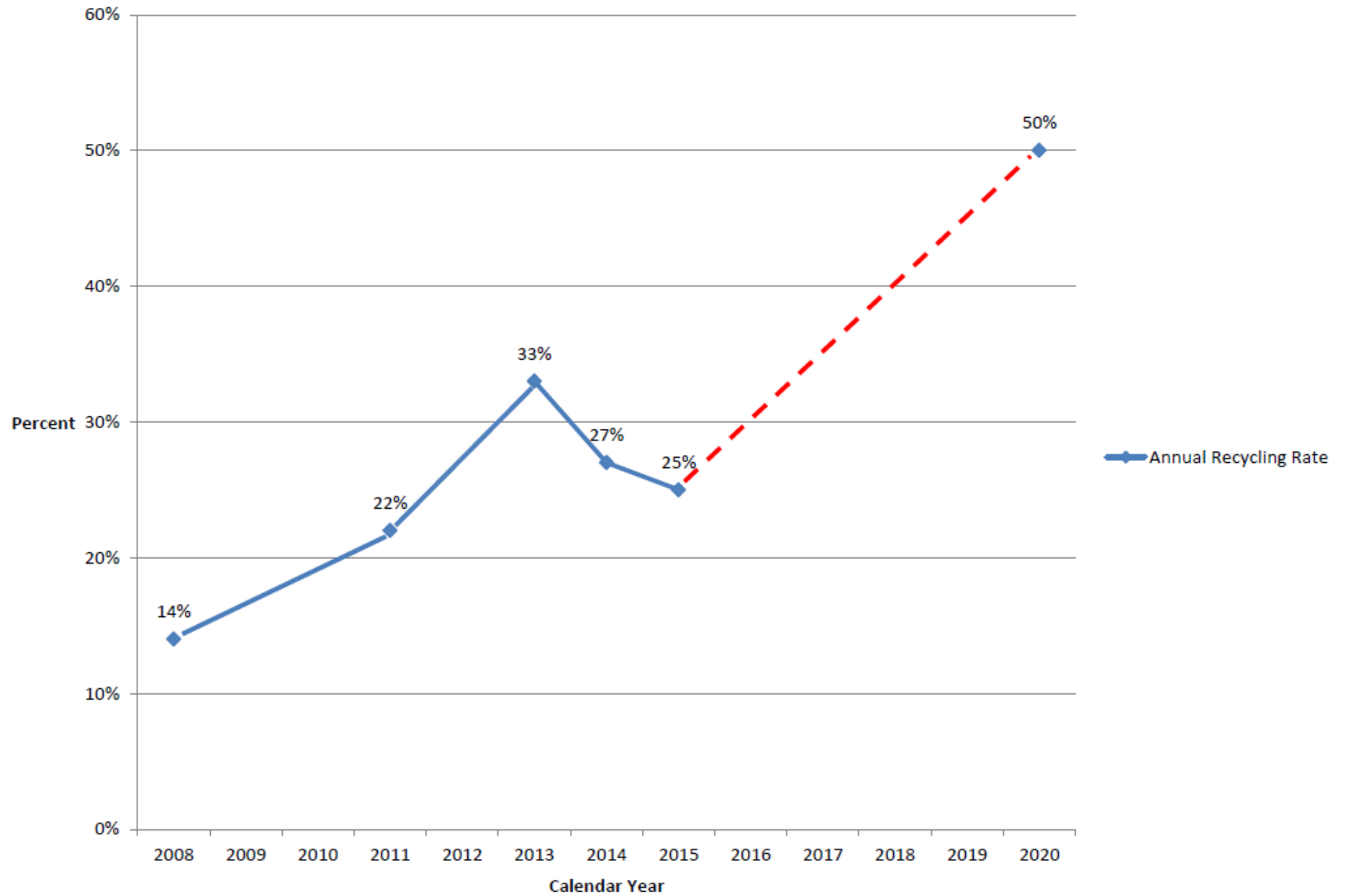
DRAFT - Massachusetts C&D Handling Facilities - DRAFT

Tons of C&D Accepted and Handled by Facility in 2015*

*As reported to MassDEP in 2015 Solid Waste Facility Report (C&D Processor or Transfer Station)



C&D Annual Recycling Rate Trend Chart



Announcements/Open Discussion

- EBCNE 11th Annual C&D Regional Summit
 - Sheraton Hotel, Framingham
 - Thursday, January 26, 2017
 - 8:00 am to 12:00 noon



<http://ebcne.org/calendar/>

Closing/Next Steps

- Next MassDEP C&D Subcommittee Meeting
Ca. March 2017
 - Recommendations of 2016 C&D Market Study
 - Draft BMPs for Generators of C&D Material

For More Information:

Point of Contact:

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